

REMARKS ARGUMENTS

Claims 1-5 are pending herein.

1. The Examiner has withdrawn claims 4 and 5 from further consideration and has argued that claims 1 and 2 are not generic to all species, because the species shown in Fig. 4 "does not have an AC signal applied to the actuator." As explained in paragraphs [0012] and [0020] of the specification, Fig. 4 is simply yet another embodiment of the present invention provided to show another structure, but does not otherwise depart from the present invention as explained with reference to Figs. 1-3. As one skilled in the art would readily recognize, the AC signal would be applied to the actuator 10 in order to produce the desired DC output from the sensor element 9. The AC signal applying structure was simply omitted from Fig. 4 for the sake of clarity. For all of the foregoing reasons, Applicants respectfully submit that claims 1 and 2 are generic to all species shown in the drawings. Moreover, the provisional election was specifically made with traverse in the response filed August 6, 2002.
2. The Examiner objected to the drawings and argued that element (1) is not shown in any of the drawings. The same objection was made in the Office Action mailed February 19, 2002, and Applicants responded to that objection by filing amended Fig. 1 on June 17, 2002. A copy of the June 17, 2002 Submission of Amended Drawing and amended Fig. 1, along with our postcard receipt, is attached for the Examiner's convenience. It is noteworthy that the drawing objection in the Office Action mailed February 19, 2002 was with reference to Fig. 1 only. Had the PTO intended for reference numeral 1 to appear in all of the drawings, it should have made that objection in the first Office Action.

For all the foregoing reasons, the objection to the drawings should be reconsidered and withdrawn.

3. The Examiner rejected claims 1, 2 and 3 under §112, second paragraph and argued that the claims do not clearly explain the interrelation and association between the distortion of the electrostrictive elements and the amount of deformation recited in claim 1, as well as the interrelation and association between the electromotive force recited in claim 2 and the absolute value recited in claim 1.

As described in paragraph [0005] of the specification, for example, "an alternating current signal is calculated into an absolute value and output by impressing the alternating current to the electrostrictive elements to deform the same and by converting a distortion of the electrostrictive elements into an electric signal using the detecting means." As further detailed in paragraph [0015] of the specification, the actuator 2 will be deformed in the identical direction as the electrostrictive elements 1 (which were deformed by impressing an AC signal as previously stated), thus expressing an electric signal as an absolute value, such as the electromotive force generated by the sensor element 3. That is, deformation of the actuator 2 will distort the shape of sensor element 3, and that distortion results in an electromotive force being generated by the sensor element 3. As explained throughout the specification, the present invention allows conversion from AC to DC while allowing electrical isolation between the input signal applied to the actuator 2 and the output signal emitted from the sensor element 3.

For at least the foregoing reasons, Applicants respectfully submit that all pending claims herein are in full compliance with §112, second paragraph. As such, Applicants respectfully submit that this patent application is in condition for allowance.

If the Examiner believes that contact with Applicants' attorney would be desirable in placing this application in even better condition for issue, the Examiner is herein requested to call Applicants' attorney at the phone number noted below.

Applicants' undersigned representative telephoned the Examiner on July 22, 2003 to discuss these rejections, but the Examiner requested a written response instead. Since the opportunity to discuss the rejections via a telephonic

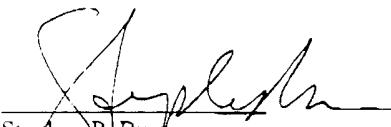
interview was not granted by the Examiner, Applicants respectfully request that the next Office Action, if any, be non-final.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,

September 15, 2003

Date


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SPB/SEC/gmh

Enclosures: Copy of Submission of Amended Drawing filed 6/17/02
Copy of Fig. 1
Copy of our postcard receipt

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